

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 08/31/2006

| APPLICATION NO. | FILI | NG DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|--------------|------------|----------------------|---------------------|------------------|
| 10/800,845 03/15/2004 | | 15/2004 | Masato Sone | Yosh.7543 | 1514 |
| 7: | 590 | 08/31/2006 | | EXAM | INER |
| Matthew E. C | onnors | | • | TAKAOKA, DEAN O | |
| Gauthier & Cor | nnors LLI |) | • | | |
| Suite 3300 | | | | ART UNIT | PAPER NUMBER |
| 225 Franklin Street | | | | 2817 | |
| Docton MA / | 02110 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | | |
|--|---|---------------------------------------|--|--|--|--|--|
| Office Action Summany | 10/800,845 | SONE ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | Dean O. Takaoka | 2817 | | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | |
| Status | | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | | |
| · _ · · · · · · · · · · · · · · · · · · | | | | | | | |
| · <u> </u> | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| · | | 0 0,0, 2,0, | | | | | |
| Disposition of Claims | | | | | | | |
| 4) Claim(s) 1-22 is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| • | Claim(s) is/are rejected. | | | | | | |
| <u> </u> | Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) <u>1-22</u> are subject to restriction and/or election requirement. | | | | | | | |
| Application Papers | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| <u>-</u> | priority under 35 LLS C & 110(a) | (d) or (f) | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | |
| a) All b) Some * c) None of: | | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Attachment(s) | 1 | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | Paper No(s)/Mail Da 5) Notice of Informal Pa | te atent Application (PTO-152) | | | | | |
| Paper No(s)/Mail Date | 6) Other: | , , , , , , , , , , , , , , , , , , , | | | | | |

DETAILED ACTION

Page 2

Election/Restrictions

This application contains claims directed to the following patentably distinct species: The species are independent or distinct because

Species I, figures 1, 5 and 10 are drawn to a symmetrical bridge type switch circuit with shunt connected elements, antenna and dual input connections.

Species II, figure 2 is drawn to a symmetrical switch circuit comprising dual symmetrical parallel switch circuits having shunt diode and capacitors, a single input and single output connection with respective driving circuits connected to an instruction connection.

Species III, figure 3 is drawn to a coax central conductor with a shunt connected thermal fuse in series with an inductance and a feed through capacitor.

Species IV, figure 4 is drawn to a microswitch mounted on a panel contacting Ulink shaped transmission lines having equal length portions and a diode mounting potion separating the equal lengths of the transmission line.

Species V, figures 6a and 6b are drawn to a shunt connected switching circuit comprising back to back diodes with a shunt connected inductor between the diodes.

Species VI, figure 7 is drawn to a symmetrical bridge type switch circuit with series connected elements, antenna connection and dual input connections.

Species VII, figure 8 is drawn to a series connected diode switching circuit comprising a shunt inductor and series capacitor, further comprising a shunt connected drive circuit connected to an instruction connection, shunt capacitor and series inductor.

Species VIII, figure 9 is drawn to a bridge type switch circuit having opposite symmetrical arms with series connected diode elements, capacitors and shunt inductors connected to a drive circuit in one pair of symmetrical arms and shunt connected diode elements and equal length transmission lines in the other pair of symmetrical arms, and an antenna and dual input connections.

Species IX, figure 11 is drawn to a system comprising dual bridge switch array circuits connected at the four ports by symmetrical and asymmetrical length transmission line bridges where each switch in the dual bridge switch array is mutuially connected by a solenoid drive controller.

Species X, figure 12 is drawn to a hybrid circuit where two opposing hybrid circuits are connected to a variable capacitor at each branch, the input hybrid circuit comprising dual inputs and the antenna hybrid isolated at one end.

Species XI, figure 13 is drawn to a symmetrical switch circuit comprising two transistor switches with a shunt connected resistor, further where each transistor is connected in series with a bias circuit and a common controller circuit and where one transistor is connected with a positive power supply and the other transistor is connected with a negative power supply.

Species XII, figure 14 is drawn to temporarily changing bias and switching direction comprising a forward bias and reverse bias where the switching circuit further includes recovery after a stable condition.

Art Unit: 2817

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, none of the claims is generic.

Page 4

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Application/Control Number: 10/800,845 Page 5

Art Unit: 2817

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean O. Takaoka whose telephone number is (571) 272-1772. The examiner can normally be reached on 8:30a - 5:00p Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/800,845

Art Unit: 2817

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Page 6

dot

August 28, 2006